

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937522

Luminaire Tested: SQ4-FB-100U-075D-927-1D-UNV-STD-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937522
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

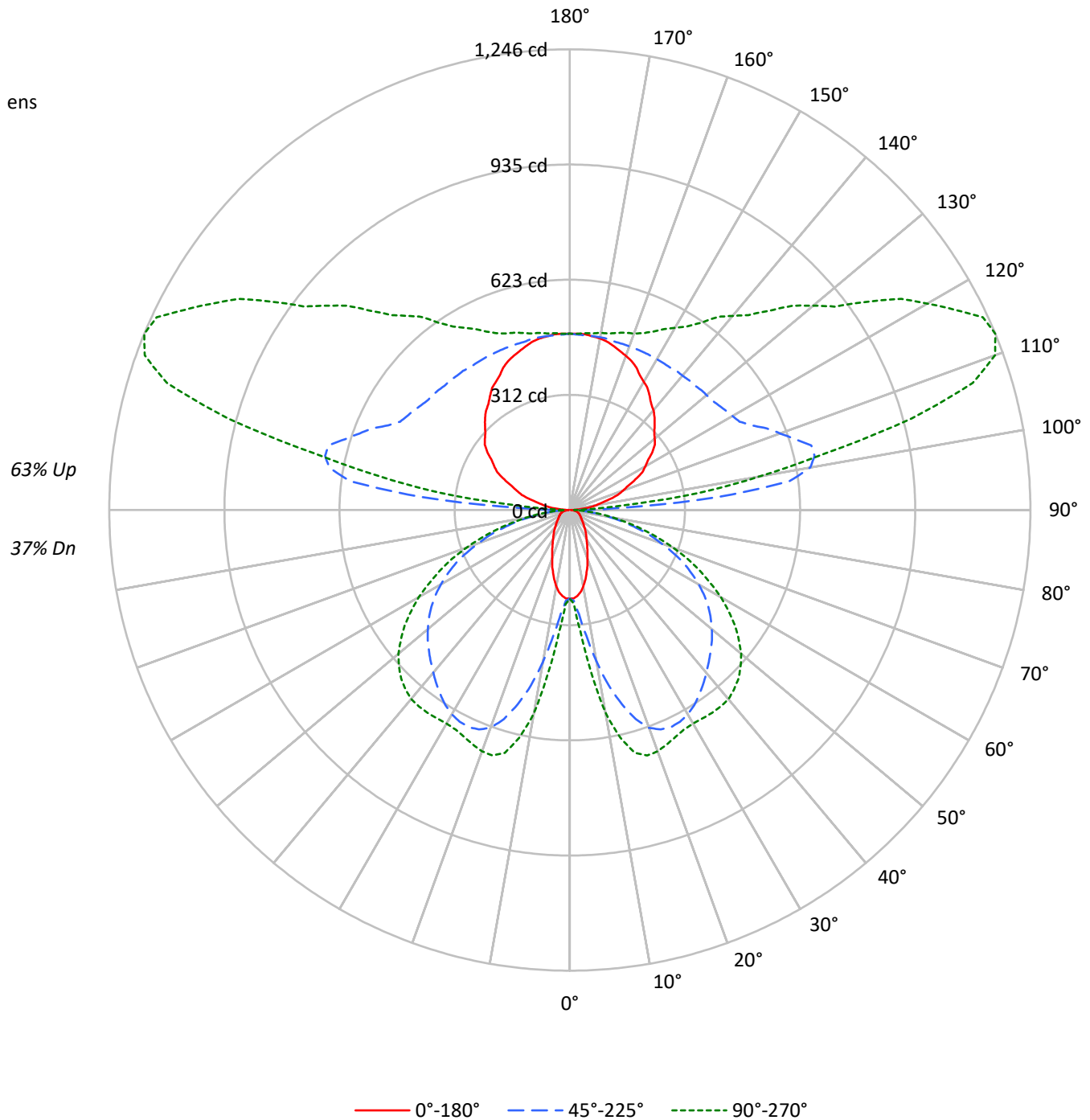
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4947.9 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37			37
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31			31
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25			25
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21			21
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17			17
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13			13
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11			11
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10			10
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9			9
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2222	2222	2222
5°	2168	2566	2987
10°	1964	3738	4952
15°	1668	4880	5979
20°	1356	5652	6093
25°	1129	5910	5970
30°	952	5942	5958
35°	841	5839	6113
40°	731	5706	6272
45°	661	5607	6297
50°	604	5517	6192
55°	578	5388	5917
60°	589	5144	5484
65°	611	4777	4889
70°	645	4157	4129
75°	708	3380	3223
80°	758	2337	2171
85°	638	1233	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6297 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	0.6
10°-20°	137.3	2.8
20°-30°	240.1	4.9
30°-40°	309.1	6.2
40°-50°	345.3	7.0
50°-60°	330.7	6.7
60°-70°	262.1	5.3
70°-80°	154.1	3.1
80°-90°	44.6	0.9
90°-100°	232.6	4.7
100°-110°	611.6	12.4
110°-120°	634.1	12.8
120°-130°	508.6	10.3
130°-140°	399.1	8.1
140°-150°	306.3	6.2
150°-160°	220.6	4.5
160°-170°	135.0	2.7
170°-180°	45.6	0.9
0°-30°	408.4	8.3
0°-40°	717.5	14.5
0°-60°	1393.5	28.2
0°-90°	1854.4	37.5
90°-120°	1478.3	29.9
90°-150°	2692.4	54.4
90°-180°	3094.0	62.5
0°-180°	4947.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	240	240	240	240	240	
5°	233	250	282	319	330	22
15°	175	323	544	659	680	49
25°	112	366	648	676	677	51
35°	76	350	610	644	670	47
45°	52	279	539	618	645	40
55°	37	177	457	531	546	34
65°	29	94	340	382	387	29
75°	22	58	186	205	206	23
85°	8	18	46	51	52	8
90°	3	9	24	12	12	3
95°	31	120	401	207	141	34
105°	110	167	676	1026	958	117
115°	196	238	542	1080	1233	193
125°	272	305	493	832	982	242
135°	324	357	477	672	762	251
145°	376	400	471	573	618	236
155°	425	437	471	517	532	195
165°	459	465	471	490	496	130
175°	477	477	474	480	480	45
180°	477	477	477	477	477	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	239.5	239.5	241.0	241.8	243.3	244.1	245.6	247.2	251.8	252.6	254.1
5°	233.3	236.4	246.4	250.2	261.0	275.7	281.8	291.8	312.6	318.8	322.6
7.5°	224.1	231.0	255.6	261.8	288.8	327.2	343.4	365.0	398.1	414.3	427.4
10°	209.4	224.1	268.0	282.6	326.5	385.0	415.0	445.1	495.1	517.4	525.9
12.5°	193.3	217.1	281.0	301.1	364.2	449.7	485.9	519.0	576.0	606.0	610.6
15°	174.8	207.1	293.4	322.6	404.2	503.6	543.6	584.4	637.6	659.1	664.5
17.5°	158.6	199.4	304.9	335.7	435.0	552.1	592.9	626.8	669.9	684.5	688.4
20°	138.6	187.1	312.6	352.7	467.4	587.5	626.8	653.0	682.2	691.5	693.0
22.5°	124.0	174.0	317.2	358.8	489.0	609.1	642.2	663.0	683.0	686.1	686.8
25°	111.6	159.4	316.5	365.8	507.4	622.2	647.6	663.0	674.5	676.1	676.1
27.5°	100.1	143.2	313.4	367.3	521.3	625.2	645.3	656.0	661.4	664.5	664.5
30°	90.1	127.8	305.7	364.2	527.4	622.2	638.3	643.7	649.1	653.7	656.0
32.5°	82.4	113.2	294.1	358.0	528.2	614.5	626.0	629.1	636.8	647.6	651.4
35°	75.5	98.6	281.0	349.6	523.6	602.1	609.8	612.9	628.3	644.5	649.9
37.5°	68.5	87.8	264.1	335.0	516.7	587.5	592.9	598.3	622.2	641.4	647.6
40°	61.6	78.5	244.1	318.8	505.9	569.8	574.4	582.9	614.5	636.8	643.0
42.5°	56.2	70.8	222.5	301.8	492.0	549.8	556.7	569.0	605.2	629.1	636.0
45°	51.6	63.1	199.4	278.7	474.3	529.0	539.0	555.9	594.4	617.5	623.7
47.5°	47.0	57.8	175.6	254.9	455.1	508.2	521.3	540.5	579.8	602.1	607.5
50°	43.1	52.4	151.7	229.5	434.3	485.9	501.3	521.3	561.3	582.1	589.1
52.5°	40.0	47.7	129.4	204.0	410.4	462.8	480.5	501.3	539.0	559.0	563.6
55°	37.0	43.9	110.1	177.1	385.8	438.1	457.4	477.4	514.4	531.3	534.4
57.5°	35.4	40.8	93.9	151.7	359.6	410.4	432.0	450.4	485.1	498.2	501.3
60°	33.1	38.5	81.6	130.1	331.1	384.2	402.7	421.2	450.4	461.2	463.5
62.5°	30.8	37.0	72.4	109.3	301.8	353.4	371.9	388.8	413.5	421.2	424.3
65°	29.3	35.4	65.4	93.9	271.8	321.1	339.6	354.2	374.2	381.9	383.5
67.5°	27.7	33.9	60.1	80.9	241.8	288.8	302.6	316.5	331.9	339.6	340.3
70°	25.4	32.3	55.4	71.6	211.0	251.8	263.3	278.0	290.3	294.1	296.4
72.5°	23.9	30.0	52.4	64.7	179.4	216.4	227.2	235.6	246.4	250.2	250.2
75°	21.6	27.0	49.3	57.8	147.1	177.1	186.3	194.8	203.3	204.8	202.5
77.5°	19.2	23.9	42.4	48.5	114.7	140.1	147.8	152.5	159.4	160.9	161.7
80°	16.2	20.8	33.1	37.7	83.2	103.2	108.6	112.4	118.6	118.6	120.1
82.5°	12.3	16.2	23.9	27.0	56.2	70.8	75.5	77.8	81.6	81.6	81.6
85°	7.7	10.0	15.4	17.7	33.9	43.1	46.2	47.0	50.1	50.8	50.8
87.5°	3.8	5.4	10.0	10.8	17.7	22.3	22.3	23.9	23.9	23.1	22.3
90°	3.2	5.8	8.3	8.9	14.1	20.9	24.3	21.6	16.2	12.2	12.2
92.5°	12.8	34.6	56.4	61.8	86.9	120.4	137.1	120.1	86.2	60.8	58.4
95°	30.7	70.6	110.5	120.4	213.8	338.3	400.6	357.5	271.3	206.6	199.3
97.5°	53.1	88.3	123.5	132.3	288.1	495.7	599.5	572.3	517.7	476.9	462.9
100°	70.5	102.3	134.2	142.2	315.1	545.5	660.7	662.7	666.7	669.7	653.0
102.5°	85.2	115.0	144.7	152.2	327.5	561.2	678.1	712.8	782.2	834.3	820.0
105°	110.2	135.4	160.5	166.9	336.6	562.9	676.1	754.0	909.7	1026.5	1018.9
107.5°	135.8	159.3	182.8	188.6	338.3	537.8	637.6	746.3	963.5	1126.4	1128.3
110°	153.1	174.3	195.5	200.8	335.7	515.7	605.6	727.0	969.9	1152.0	1160.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	170.1	190.3	210.4	215.5	335.9	496.3	576.5	700.8	949.3	1135.7	1147.9
115°	195.7	214.3	232.9	237.6	339.0	474.1	541.6	661.4	900.7	1080.3	1097.2
117.5°	221.0	237.9	254.9	259.1	345.3	460.2	517.6	625.6	841.7	1003.8	1022.6
120°	235.7	251.6	267.6	271.6	350.4	455.5	508.0	606.7	804.1	952.2	970.5
122.5°	250.2	266.3	282.4	286.4	357.7	453.0	500.6	589.4	767.2	900.6	918.6
125°	272.3	286.9	301.5	305.2	367.7	450.9	492.6	568.1	719.1	832.4	849.0
127.5°	290.1	304.9	319.8	323.5	377.6	449.8	485.9	550.7	680.4	777.6	791.6
130°	299.8	315.7	331.6	335.6	384.8	450.5	483.3	541.1	656.5	743.1	756.0
132.5°	309.7	325.6	341.6	345.6	390.7	450.9	481.0	532.7	636.0	713.6	725.2
135°	324.5	339.0	353.5	357.1	397.2	450.5	477.2	520.5	607.0	671.9	681.9
137.5°	339.5	353.9	368.2	371.8	406.7	453.3	476.6	513.1	586.3	641.2	649.3
140°	352.0	365.2	378.5	381.8	412.6	453.8	474.3	505.9	569.1	616.5	624.2
142.5°	361.6	373.8	386.1	389.2	417.6	455.4	474.3	502.0	557.6	599.2	605.8
145°	376.3	387.0	397.6	400.3	424.0	455.5	471.2	493.9	539.2	573.3	578.3
147.5°	391.1	401.5	411.8	414.4	433.4	458.5	471.2	489.0	524.8	551.6	555.7
150°	400.6	410.0	419.4	421.8	438.3	460.2	471.2	486.3	516.4	539.0	542.3
152.5°	410.6	417.6	424.8	426.6	441.4	461.2	471.2	484.0	509.7	529.1	531.6
155°	425.3	430.6	435.9	437.2	448.5	463.6	471.2	481.4	501.9	517.2	518.9
157.5°	436.2	441.4	446.4	447.8	455.5	465.9	471.2	479.1	495.0	507.0	508.1
160°	443.6	447.6	451.5	452.5	458.8	467.0	471.2	478.0	491.6	501.9	502.6
162.5°	450.9	453.9	456.9	457.7	462.2	468.2	471.2	476.9	488.4	497.0	497.7
165°	458.9	461.6	464.3	465.0	467.1	469.8	471.2	475.3	483.6	489.7	490.4
167.5°	466.3	467.6	468.9	469.2	470.9	473.2	474.3	477.0	482.4	486.5	486.8
170°	471.2	472.4	473.7	474.0	474.1	474.2	474.3	477.0	482.4	486.5	486.5
172.5°	473.7	474.0	474.2	474.3	474.3	474.3	474.3	476.5	480.7	483.9	483.7
175°	477.2	477.2	477.2	477.2	476.2	474.9	474.3	475.7	478.4	480.4	480.4
177.5°	477.2	477.2	477.2	477.2	476.5	475.5	474.9	476.0	478.2	479.8	479.5
180°	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2	477.2



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	239.5	239.5
2.5°	255.6	254.1
5°	328.8	330.3
7.5°	442.8	442.0
10°	550.6	557.5
12.5°	629.1	630.6
15°	676.8	679.9
17.5°	695.3	696.1
20°	696.1	694.5
22.5°	687.6	686.1
25°	677.6	676.8
27.5°	668.4	669.1
30°	664.5	666.8
32.5°	664.5	668.4
35°	666.1	669.9
37.5°	665.3	669.9
40°	662.2	667.6
42.5°	653.7	657.6
45°	640.6	645.3
47.5°	623.7	626.8
50°	602.1	605.2
52.5°	575.2	576.0
55°	542.8	545.9
57.5°	508.2	509.0
60°	469.7	472.0
62.5°	428.9	428.9
65°	385.8	387.3
67.5°	341.1	345.0
70°	295.7	296.4
72.5°	251.0	251.0
75°	204.8	205.6
77.5°	160.9	160.9
80°	119.4	120.1
82.5°	82.4	83.9
85°	51.6	51.6
87.5°	23.9	21.6
90°	12.2	12.2
92.5°	48.7	39.0
95°	169.9	140.6
97.5°	407.1	351.4
100°	586.6	520.1
102.5°	763.1	706.2
105°	988.2	957.6
107.5°	1135.7	1143.1
110°	1191.9	1223.8



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1196.9	1245.9
115°	1165.2	1233.1
117.5°	1097.9	1173.2
120°	1043.7	1116.8
122.5°	990.8	1063.0
125°	915.5	982.0
127.5°	847.8	903.8
130°	807.8	859.6
132.5°	771.5	818.0
135°	721.9	761.9
137.5°	682.1	714.9
140°	654.8	685.4
142.5°	632.2	658.5
145°	598.2	618.2
147.5°	572.2	588.7
150°	555.7	569.1
152.5°	541.7	551.9
155°	525.6	532.3
157.5°	512.9	517.6
160°	505.3	508.0
162.5°	500.3	502.8
165°	493.1	495.8
167.5°	487.9	489.0
170°	486.5	486.5
172.5°	482.7	481.7
175°	480.4	480.4
177.5°	478.4	477.2
180°	477.2	477.2



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	2.50	3.28	3.55	4.34	5.78	15.64	16.42	16.69	17.48	18.92
	3H	3.20	3.90	4.26	4.97	6.42	17.45	18.16	18.51	19.23	20.68
	4H	3.49	4.16	4.56	5.23	6.69	18.09	18.76	19.16	19.83	21.29
	6H	3.74	4.36	4.82	5.43	6.90	18.50	19.12	19.58	20.19	21.67
	8H	3.80	4.39	4.89	5.48	6.95	18.61	19.20	19.70	20.29	21.76
	12H	3.82	4.38	4.91	5.46	6.96	18.67	19.23	19.76	20.31	21.81
4H	2H	9.68	10.35	10.76	11.42	12.88	15.90	16.57	16.98	17.64	19.10
	3H	11.24	11.80	12.33	12.90	14.37	17.93	18.49	19.01	19.58	21.06
	4H	11.33	11.85	12.43	12.94	14.43	18.68	19.19	19.77	20.28	21.78
	6H	11.34	11.78	12.44	12.89	14.38	19.20	19.64	20.30	20.76	22.24
	8H	11.32	11.73	12.42	12.83	14.34	19.35	19.77	20.46	20.87	22.38
	12H	11.27	11.64	12.39	12.76	14.27	19.44	19.81	20.55	20.93	22.44
8H	4H	12.76	13.17	13.86	14.28	15.78	18.73	19.15	19.83	20.25	21.76
	6H	13.00	13.34	14.12	14.49	15.99	19.35	19.69	20.47	20.83	22.34
	8H	13.02	13.32	14.15	14.44	15.97	19.56	19.86	20.69	20.98	22.51
	12H	12.98	13.25	14.12	14.37	15.93	19.69	19.95	20.82	21.08	22.64
12H	4H	12.90	13.27	14.02	14.39	15.90	18.68	19.06	19.80	20.17	21.68
	6H	13.25	13.55	14.38	14.68	16.20	19.33	19.63	20.46	20.76	22.28
	8H	13.32	13.58	14.45	14.71	16.27	19.55	19.81	20.68	20.93	22.49